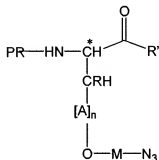


Listing of the Claims

1. -17. Canceled

18. (Currently amended) A protected amino acid useful for synthesis of a selectively derivatized peptide which has the formula:



and salts thereof wherein:

* indicates that the indicated C may be chiral, non-racemic or racemic;

PR is any appropriate an amine protecting group wherein the conditions for removal of the protecting group are substantially orthogonal to the conditions for removal of the azide-bearing protecting group;

R' is OH, OR, OAr, NH₂, NH(R or Ar), NR₂, N(Ar)₂, a group that generates an activated ester, a halogen, a substituted phenyl group, a halogenated phenyl group, benzotriazol-1-yl, *N*-hydroxysuccinimido, or 3,4-dihydro-4-oxo-1,2,3-benzotriazin-3-yl, where Ar is an optionally substituted aryl group;

R is H or alkyl,

A is an optionally substituted phenyl group;

n is 0 or 1; and

M is selected from the group consisting of:

- (CH₂)_m– where m is 1-6;
- CH₂–phenyl– wherein the phenyl can be optionally substituted;
- CH₂–phenyl–O– wherein the phenyl can be optionally substituted;
- (CR₂)_m– where m is 1-6, each R selected independently of other R;
- CO–NH–SO₂–CH₂–CH₂–; and
- CO–NH–CH₂–CH₂–.

19. (Original) The protected amino acid of claim 18 wherein PR is acid labile.
20. (Original) The protected amino acid of claim 18 wherein PR is base labile.
21. (Currently amended) The protected amino acid of claim 18 wherein PR is selected from the group consisting of [[:]] Boc, Bpoc, Trityl, Fmoc, Fmoc; 2-nitrosulphonyl, dithiasuccinoyl, diphenylphosphinyl, and sulfonyl.
22. (Original) The protected amino acid of claim 18 wherein n is 1 and R is H.
23. (Original) The protected amino acid of claim 18 wherein n is 0 and R is CH₃.
24. (Original) The protected amino acid of claim 18 wherein n is 0 and R is H.
25. (Original) The protected amino acid of claim 18 wherein the amino-protecting group is Fmoc.
26. (Original) The protected amino acid of claim 25 wherein n is 1 and R is H.
27. (Original) The protected amino acid of claim 26 wherein M is –CH₂–.
28. (Original) The protected amino acid of claim 18 wherein M is –CH₂–.

29. (Original) The protected amino acid of claim 18 wherein R' is fluoride or chloride.
30. (Original) A kit for the synthesis of a derivatized peptide which comprises one or more of the azide-protected amino acids of claim 18.
31. (Original) The kit of claim 30 wherein, in the azide-protected amino acid, PR is acid labile.
32. (Original) The kit of claim 30 wherein, in the azide-protected amino acid, PR is base labile.
33. (Currently amended) The kit of claim 30 wherein, in the azide-protected amino acid, PR is selected from the group consisting of [[:]] Boc, Bpoc, Trityl, Fmoc, Fmoc; 2-nitrosulphonyl, dithiasuccinoyl, diphenylphosphinyl, and sulfonyl.
34. (Original) The kit of claim 30 wherein, in the azide protected amino acid, n is 1 and R is H.
35. (Original) The kit of claim 30 wherein, in the azide protected amino acid, n is 0 and R is CH₃.
36. (Original) The kit of claim 30 wherein, in the azide protected amino acid, n is 0 and R is H.
37. (Original) The kit of claim 30 wherein, in the azide protected amino acid, the amino-protecting group is Fmoc.
38. (Original) The kit of claim 30 wherein, in the azide protected amino acid, n is 1 and R is H.

39. (Original) The kit of claim 38 wherein, in the azide protected amino acid, M is $-\text{CH}_2-$.
40. (Currently amended) The kit of claim 30 wherein, in the azide protected amino acid, M is $[[-\text{CH}_2-]]-\text{CH}_2-$.
41. (Original) The kit of claim 30 further comprising one or more amino acids for peptide synthesis other than azide-protected hydroxy amino acids wherein said one or more amino acids for peptide synthesis comprise α -amine group protection, optional side-chain protection and optional carboxy group protection, activation or both as appropriate for use with PR and the azide protecting group of the azide-protected hydroxy amino acids in the kit.
42. (Original) The kit of claim 41 wherein, in the azide-protected amino acid, PR is Fmoc.
43. (Original) The kit of claim 41 wherein, in the azide-protected amino acid, PR is Boc.
44. (Original) The kit of claim 30 further comprising solid support materials appropriate for conducting peptide synthesis employing the protected amino acid or acids provided in the kit.
45. (Original) The kit of claim 30 further comprising one or more reagents for deprotecting the azide-protected amino acids in the kit.
46. (Original) The kit of claim 30 further comprising one or more reagents for sulfation of a deprotected hydroxy amino acid.
47. (Original) The kit of claim 30 further comprising one or more reagents for phosphorylation of a deprotected hydroxy amino acid.

48. (Original) The kit of claim 30 further comprising one or more reagents for glycosylation of a deprotected hydroxy amino acid.
49. (Original) The kit of claim 30 further comprising instructions for conducting peptide synthesis employing the azide-protected amino acids in the kit.
50. (Original) A method for synthesizing a selectively modified peptide or amino acid which comprises the step of synthesizing a selectively-modified peptide employing the kit of claim 30.
- 51.-56. Cancelled
57. (Original) The method of claim 50 wherein at least a portion of the peptide or protein is provided by step-wise solid phase peptide synthesis on a resin employing an amine-protected hydroxy amino acid in which the hydroxy group is protected with an azidomethylene group to incorporate at least one azide-protected hydroxy amino acid residue on a peptide synthesized on the resin.
58. (Original) The method of claim 57 wherein the amine protection group on the amine-protected hydroxy amino acid is an Fmoc group.
59. (Original) The method of claim 57 wherein the hydroxy amino acid is a tyrosine.
60. (Original) The method of claim 59 wherein the amine protection group on the amine-protected tyrosine is an Fmoc group.
61. (Original) The method of claim 57 wherein the azidomethylene protecting group is cleaved prior to cleavage of the peptide from the resin.
62. (Original) The method of claim 61 wherein the resin is a 2-chlorotrityl resin.

63.-66. Cancelled

67. (New) The protected amino acid of claim 18 wherein M is $-(CR_2)_m-$.

68. (New) The protected amino acid of claim 18 wherein M is $-(CH_2)_m-$.

69. (New) The protected amino acid of claim 26 wherein M is $-(CR_2)_m-$.

70. (New) The protected amino acid of claim 26 wherein M is $-(CH_2)_m-$.

71. (New) The kit of claim 30 wherein, in the azide protected amino acid, M is $-(CR_2)_m-$.

72. (New) The kit of claim 30 wherein, in the azide protected amino acid, M is $-(CH_2)_m-$.

73. (New) The kit of claim 38 wherein, in the azide protected amino acid, M is $-(CR_2)_m-$.

74. (New) The kit of claim 38 wherein, in the azide protected amino acid, M is $-(CH_2)_m-$.

75. (New) The protected amino acid of claim 18 which is an L-isomer.